

## CLAIMS

What is claimed is:

- 1 ~~Buy~~ 1. A home server comprising:  
2 ~~AT~~ a personalization engine to create personal preference information from a user  
3 regarding a content, the personal preference information being represented in a  
4 description compatible with a content analyzer in an edge server; and  
5 a content scheduler coupled to the personalization engine to schedule delivery  
6 of the content from the edge server and uploading of the personal preference  
7 information to the edge server.
- 1 — 2. The home server of claim 1 further comprising:  
2 a local storage to cache the content delivered from the edge server; and  
3 a content manager coupled to the local storage to manage the cached content.
- 1 — 3. The home server of claim 1 wherein the description is compatible with a  
2 metadata associated with the content.
- 1 4. The home server of claim 3 wherein the metadata is one of a closed  
2 caption, a Resource Description Framework (RDF), motion picture expert group  
3 (MPEG)-7, TV-Anytime metadata, a Society of Motion Picture and Television  
4 Engineers (SMPTE) metadata dictionary, a Dublin Core descriptor, and an European  
5 Broadcasting Union (EBU) P/meta.
- 1 — 5. The home server of claim 1 wherein the personalization engine  
2 comprises:  
3 a deduction engine to deduce the personal preference information based on  
4 user's usage.
- 1 — 6. The home server of claim 1 wherein the personalization engine  
2 comprises:  
3 an input interface to obtain the personal preference information provided by the  
4 user.

1 — 7. The home server of claim 2 wherein the content manager comprises:  
2 a retriever to retrieve the cache content;  
3 an indexer to index the cache content; and  
4 a distributor to distribute the retrieved cache content to a device.

1 — 8. The home server of claim 7 wherein the content manager further  
2 comprises:  
3 a decryptor to decrypt the cache content; and  
4 an archiver to archive the cached content.

1 — 9. The home server of claim 7 wherein the device is one of a viewing  
2 device, a personal digital assistant (PDA), an audio visual device, a tablet, a personal  
3 computer, a set-top box, a digital television set, and a wireless device.

1 10. An edge server comprising:  
2 a content analyzer to analyze a content received from a media source based on a  
3 description compatible with personal preference information from a user regarding the  
4 content, the personal preference information being provided by a home server; and  
5 a content filter coupled to the content analyzer to filter the content according to  
6 the personal preference information for delivery to the user.

1 11. The edge server of claim 10 further comprising:  
2 a content assembler to assemble the filtered content using the description into a  
3 packaged content according to an assembly criterion; and  
4 a content distributor coupled to the content assembler to distribute the packaged  
5 content to the user based on delivery information provided by the home server.

1 12. The edge server of claim 10 wherein the media source is one of a Web  
2 content, a television broadcast, a media broadcast, a video program, an audio program,  
3 and an audio visual program.

1 13. The edge server of claim 10 wherein the description is compatible with a  
2 metadata associated with the content.

1 14. The edge server of claim 13 wherein the metadata is one of a closed  
 2 caption, a Resource Description Framework (RDF), motion picture expert group  
 3 (MPEG)-7, a TV-Anytime metadata, a Society of Motion Picture and Television  
 4 Engineers (SMPTE) metadata dictionary, a Dublin Core descriptor, and an European  
 5 Broadcasting Union (EBU) P/meta.

1 15. The edge server of claim 10 wherein the assembly criterion is one of a  
 2 semantic topic and a subscription level.

1 16. The edge server of claim 10 wherein the delivery information includes at  
 2 least a scheduled time, a quality of service information, and a transmission bandwidth.

1 17. The edge server of claim 13 wherein the content analyzer comprises:  
 2 a parser to parse the metadata.

1 18. The edge server of claim 10 wherein the content analyzer comprises:  
 2 a metadata creator to create a metadata associated with the content.

1 19. The edge server of claim 10 wherein the content filter comprises:  
 2 a matcher to match the description with the personal preference information.

1 20. A method comprising:  
 2 creating personal preference information from a user regarding a content, the  
 3 personal preference information being represented in a description compatible with a  
 4 content analyzer in an edge server; and  
 5 scheduling delivery of the content from the edge server and uploading of the  
 6 personal preference information to the edge server.

1 21. The method of claim 20 further comprising:  
 2 caching the content delivered from the edge server; and  
 3 managing the cached content.

1 22. The method of claim 20 wherein the description is compatible with a  
 2 metadata associated with the content.

1           23.     The method of claim 22 wherein the metadata is one of a closed caption,  
2     a Resource Description Framework (RDF), motion picture expert group (MPEG)-7,  
3     TV-Anytime metadata, a Society of Motion Picture and Television Engineers (SMPTE)  
4     metadata dictionary, a Dublin Core descriptor, and an European Broadcasting Union  
5     (EBU) P/meta.

1           24.     The method of claim 20 wherein creating personal preference  
2     information comprises:  
3           deducing the personal preference information based on user's usage.

1           25.     The method of claim 20 wherein creating personal preference  
2     information comprises:  
3           obtaining the personal preference information provided by the user.

1           26.     The method of claim 21 wherein scheduling delivery comprises:  
2           retrieving the cache content;  
3           indexing the cache content; and  
4           distributing the retrieved cache content to a device.

1           27.     The method of claim 26 wherein scheduling delivery further comprises:  
2           decrypting the cache content; and  
3           archiving the cached content.

1           28.     The method of claim 26 wherein the device is one of a viewing device, a  
2     personal digital assistant (PDA), an audio visual device, a tablet, a personal computer, a  
3     set-top box, a digital television set, and a wireless device.

1           29.     A method comprising:  
2           analyzing a content received from a media source based on a description  
3     compatible with personal preference information from a user regarding the content, the  
4     personal preference information being provided by a home server; and  
5           filtering the content according to the personal preference information for  
6     delivery to the user.

1     — 30.     The method of claim 29 further comprising:  
2             assembling the filtered content using the description into a packaged content  
3     according to an assembly criterion; and  
4             distributing the packaged content to the user based on delivery information  
5     provided by the home server.

1     — 31.     The method of claim 29 wherein the media source is one of a Web  
2     content, a television broadcast, a media broadcast, a video program, an audio program,  
3     and an audio visual program.

1     — 32.     The method of claim 29 wherein the description is compatible with a  
2     metadata associated with the content.

1     — 33.     The method of claim 32 wherein the metadata is one of a closed caption,  
2     a Resource Description Framework (RDF), motion picture expert group (MPEG)-7, a  
3     TV-Anytime metadata, a Society of Motion Picture and Television Engineers (SMPTE)  
4     metadata dictionary, a Dublin Core descriptor, and an European Broadcasting Union  
5     (EBU) P/meta.

1     — 34.     The method of claim 29 wherein the assembly criterion is one of a  
2     semantic topic and a subscription level.

1     — 35.     The method of claim 29 wherein the delivery information includes at  
2     least a scheduled time, a quality of service information, and a transmission bandwidth.

1     — 36.     The method of claim 32 wherein analyzing comprises:  
2             parsing the metadata.

1     — 37.     The method of claim 29 wherein analyzing comprises:  
2             creating a metadata associated with the content.

1     — 38.     The method of claim 29 wherein filtering comprises:  
2             matching the description with the personal preference information.

1 39. A system comprising:  
 2 a media source to provide a media content;  
 3 an edge server connected to a network; and  
 4 a home server coupled to the edge server via the network, the home server  
 5 comprising:  
 6 a personalization engine to create personal preference information from  
 7 a user regarding a content, the personal preference information being  
 8 represented in a description compatible with a content analyzer in the  
 9 edge server; and  
 10 a content scheduler coupled to the personalization engine to schedule  
 11 delivery of the content from the edge server and uploading of the  
 12 personal preference information to the edge server.

1 40. The system of claim 39 further comprising:  
 2 a local storage to cache the content delivered from the edge server; and  
 3 a content manager coupled to the local storage to manage the cached content.

1 41. The system of claim 39 wherein the description is compatible with a  
 2 metadata associated with the content.

1 42. The system of claim 41 wherein the metadata is one of a closed caption,  
 2 a Resource Description Framework (RDF), motion picture expert group (MPEG)-7,  
 3 TV-Anytime metadata, a Society of Motion Picture and Television Engineers (SMPTE)  
 4 metadata dictionary, a Dublin Core descriptor, and an European Broadcasting Union  
 5 (EBU) P/meta.

1 43. The system of claim 39 wherein the personalization engine comprises:  
 2 a deduction engine to deduce the personal preference information based on  
 3 user's usage.

1 44. The system of claim 39 wherein the personalization engine comprises:  
 2 an input interface to obtain the personal preference information provided by the  
 3 user.

1     — 45.     The system of claim 40 wherein the content manager comprises:  
2         a retriever to retrieve the cache content;  
3         an indexer to index the cache content;  
4         a distributor to distribute the retrieved cache content to a device.

1     — 46.     The system of claim 45 wherein the content manager further comprises:  
2         a decryptor to decrypt the cache content; and  
3         an archiver to archive the cached content.

1     — 47.     The system of claim 45 wherein the device is one of a viewing device, a  
2     personal digital assistant (PDA), an audio visual device, a tablet, a personal computer, a  
3     set-top box, a digital television set, and a wireless device.

1     — 48.     A system comprising:  
2         a media source to provide a media content;  
3         a home server connected to a network; and  
4         an edge server coupled to the home server via the network, the edge server  
5     comprising:  
6         a content analyzer to analyze a content received from a media source  
7         based a description compatible with personal preference information  
8         from a user regarding the content, the personal preference information  
9         being provided by a home server; and  
10         a content filter coupled to the content analyzer to filter the content  
11         according to the personal preference information for delivery to the user.

1     — 49.     The system of claim 48 further comprising:  
2         a content assembler to assemble the filtered content using the description into a  
3     packaged content according to an assembly criterion; and  
4         a content distributor coupled to the content assembler to distribute the packaged  
5     content to the user based on delivery information provided by the home server.

1     — 50.     The system of claim 48 wherein the media source is one of a Web  
2     content, a television broadcast, a media broadcast, a video program, an audio program,  
3     and an audio visual program.

1       51.     The system of claim 48 wherein the description is compatible with a  
2 metadata associated with the content.

1       52.     The system of claim 51 wherein the metadata is one of a closed caption,  
2 a Resource Description Framework (RDF), motion picture expert group (MPEG)-7, a  
3 TV-Anytime metadata, a Society of Motion Picture and Television Engineers (SMPTE)  
4 metadata dictionary, a Dublin Core descriptor, and an European Broadcasting Union  
5 (EBU) P/meta.

1       53.     The system of claim 48 wherein the assembly criterion is one of a  
2 semantic topic and a subscription level.

1       54.     The system of claim 48 wherein the delivery information includes at  
2 least a scheduled time, a quality of service information, and a transmission bandwidth.

1       55.     The system of claim 51 wherein the content analyzer comprises:  
2 a parser to parse the metadata.

1       56.     The system of claim 48 wherein the content analyzer comprises:  
2 a metadata creator to create a metadata associated with the content.

1       57.     The system of claim 48 wherein the content filter comprises:  
2 a matcher to match the description with the personal preference information.